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#### DEPARTMENT OF EDUCATION

34 CFR Chapter III

Proposed priority--National Institute on Disability and Rehabilitation Research--Disability and Rehabilitation Research Projects and Centers Program--Rehabilitation Engineering Research Centers

[CFDA Number: 84.133E-4.]

AGENCY: Office of Special Education and Rehabilitative Services, Department of Education.

ACTION: Proposed priority.

SUMMARY: The Assistant Secretary for Special Education and Rehabilitative Services proposes a priority for the Disability and Rehabilitation Research Projects and Centers Program administered by the National Institute on Disability and Rehabilitation Research (NIDRR).

Specifically, this notice proposes a priority for a Rehabilitation Engineering Research Center (RERC) on Universal Interfaces and Information Technology Access.

The Assistant Secretary may use this priority for competitions in fiscal year (FY) 2013 and later years. We take this action to focus research attention on areas of national need. We intend to use this priority to improve

rehabilitation services and outcomes for individuals with disabilities.

DATES: We must receive your comments on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Address all comments about this notice to Marlene Spencer, U.S. Department of Education, 400 Maryland Avenue, SW., room 5133, Potomac Center Plaza (PCP), Washington, DC 20202-2700.

If you prefer to send your comments by email, use the following address: marlene.spencer@ed.gov. You must include "Proposed Priorities for RERCs" and the priority title in the subject line of your electronic message.

FOR FURTHER INFORMATION CONTACT: Marlene Spencer.

Telephone: (202) 245-7532 or by email:

marlene.spencer@ed.gov.

If you use a telecommunications device for the deaf (TDD) or a text telephone (TTY), call the Federal Relay Service (FRS), toll free, at 1-800-877-8339.

# SUPPLEMENTARY INFORMATION:

This notice of proposed priority is in concert with NIDRR's Long-Range Plan (Plan). The Plan, which was published in the <u>Federal Register</u> on April 4, 2013 (78 FR 20299), can be accessed on the Internet at the following

site:

www.ed.gov/about/offices/list/osers/nidrr/policy.html.

Through the implementation of the Plan, NIDRR seeks
to: (1) improve the quality and utility of disability and
rehabilitation research; (2) foster an exchange of
expertise, information, and training methods to facilitate
the advancement of knowledge and understanding of the
unique needs of traditionally underserved populations; (3)
determine best strategies and programs to improve
rehabilitation outcomes for underserved populations; (4)
identify research gaps; (5) identify mechanisms for
integrating research and practice; and (6) disseminate
findings.

This notice proposes a priority that NIDRR intends to use for an RERC competition in FY 2013 and possibly in later years. However, nothing precludes NIDRR from publishing additional priorities, if needed. Furthermore, NIDRR is under no obligation to make an award using this priority. The decision to make an award will be based on the quality of applications received and available funding. Invitation to Comment: We invite you to submit comments regarding this notice. To ensure that your comments have maximum effect in developing the notice of final priority,

we urge you to identify clearly the specific topic that each comment addresses.

We invite you to assist us in complying with the specific requirements of Executive Orders 12866 and 13563 and their overall requirement of reducing regulatory burden that might result from this proposed priority. Please let us know of any further ways we could reduce potential costs or increase potential benefits while preserving the effective and efficient administration of the program.

During and after the comment period, you may inspect all public comments about this notice in room 5133, 550

12th Street, SW., PCP, Washington, DC, between the hours of 8:30 a.m. and 4:00 p.m., Washington, DC time, Monday through Friday of each week except Federal holidays.

Assistance to Individuals with Disabilities in Reviewing the Rulemaking Record: On request we will provide an appropriate accommodation or auxiliary aid to an individual with a disability who needs assistance to review the comments or other documents in the public rulemaking record for this notice. If you want to schedule an appointment for this type of accommodation or auxiliary aid, please contact the person listed under FOR FURTHER INFORMATION CONTACT.

Purpose of Program: The purpose of the Disability and Rehabilitation Research Projects and Centers Program is to plan and conduct research, demonstration projects, training, and related activities, including international activities, to develop methods, procedures, and rehabilitation technology that maximize the full inclusion and integration into society, employment, independent living, family support, and economic and social self-sufficiency of individuals with disabilities, especially individuals with the most severe disabilities; and to improve the effectiveness of services authorized under the Rehabilitation Act of 1973, as amended (Rehabilitation Act).

#### Rehabilitation Engineering Research Centers (RERCs) Program

The purpose of NIDRR's RERCs program, which is funded through the Disability and Rehabilitation Research Projects and Centers Program, is to improve the effectiveness of services authorized under the Rehabilitation Act. It does so by conducting advanced engineering research, developing and evaluating innovative technologies, facilitating service delivery system changes, stimulating the production and distribution of new technologies and equipment in the private sector, and providing training opportunities.

RERCs seek to solve rehabilitation problems and remove

environmental barriers to improvements in employment, community living and participation, and health and function outcomes of individuals with disabilities.

The general requirements for RERCs are set out in subpart D of 34 CFR part 350 (What Rehabilitation Engineering Research Centers Does the Secretary Assist?).

Additional information on the RERCs program can be found at: www.ed.gov/rschstat/research/pubs/index.html.

Program Authority: 29 U.S.C. 762(g) and 764(b)(3).

Applicable Program Regulations: 34 CFR part 350.

PROPOSED PRIORITY:

This notice contains one proposed priority.

Universal Interfaces and Information Technology

Access.

### Background:

In a society in which activities of daily life and community participation increasingly require information technology (IT) access and use, the inability to interface effectively with IT can be a substantial source of isolation and deprivation for individuals with disabilities (Emiliani, Stephanidis, & Vanderheiden, 2011). IT refers to the broad set of technologies employed to develop, maintain, and use computer systems, software, and networks in order to acquire, process, and distribute information

electronically. IT interfaces are the connections between computer systems, software, and networks and other related devices with human users. Individuals with disabilities who lack access to, or are unable to interact effectively with, IT systems are severely limited in opportunities to participate in education, employment, social, civic, and commercial aspects of daily life (National Council on Disability, 2006; Emiliani, Stephanidis, & Vanderheiden, 2011).

Individuals with disabilities face accessibility barriers when they use IT and IT interfaces. Many people are unable to see, hear, manipulate, understand, or read electronic interfaces in their standard formats and presentations (National Council on Disability, 2006; Vicente & Lopez, 2010). For many individuals with disabilities, as well as for the schools, employers, and libraries that might provide accessible IT solutions, the options available to address accessibility barriers are too complicated and expensive (National Council on Disability, 2006; Vanderheiden, 2008). Moreover, while accessible technology vendors once needed to provide access to just one or two computing platforms, a multitude of platforms now exists (Windows, Mac, Linux, Android, etc.). In addition, users face the challenge of working with an

increasing number of devices with different and often confusing IT interfaces designed with features that optimize mobility, such as small screens, that may not be compatible with accessibility solutions formerly developed for personal computers. These devices include telephones, tablets, and e-book readers. The rapid development and deployment of IT innovations further complicate access.

The rapid development of technology and computing platforms threatens to expand the digital divide (the gap between those that have access to IT and those who do not) (Vicente & Lopez, 2010). Future advances in accessibility of the Internet and computer systems are necessary so we, as a society, do not exclude individuals with disabilities from the information that they need to be engaged in the workforce and be fully informed and active citizens. emerging opportunity in this area is the use of cloud computing applications that allow for personalized accessible interfaces for individuals with disabilities. Such interfaces may be accessed from any computer, providing the possibility of much greater choice and independence for individuals with disabilities. These interfaces make it easier for products to comply with widely accepted standards and guidelines for accessibility, such as those implementing Section 508 of the

Rehabilitation Act (U.S. Access Board, 2008), the Web

Content Accessibility Guidelines of the Web Accessibility

Initiative (World Wide Web Consortium, 2008), and the

principles of universal design (Center for Universal

Design, 1997). By making personalized accessible interfaces

available for mainstream IT products, people with

disabilities get the benefit of lower cost and greater

consumer choice, as compared to having to use products

developed only for the use of people with disabilities.

Accordingly, NIDRR seeks to fund an RERC that enhances the

usability and effectiveness of current and emerging IT

devices and their interfaces so that they are accessible to

individuals with various disabilities.

#### References:

Center for Universal Design (1997). The Principles of Universal Design. Retrieved from:

http://www.ncsu.edu/www/ncsu/design/sod5/cud/about\_ud/udprinciplestext.htm

Emiliani, P.L., Stephanidis, C., & Vanderheiden, G. (2011). Technology and inclusion--Past, present and foreseeable future. Technology and Disability 23(3), 101-114.

National Council on Disability. (2006). Over the horizon: Potential impact of emerging trends in

information and communication technology on disability policy and practice. Washington, DC.

U.S. Access Board (n.d.) Section 508 Homepage:
Electronic and Information Technology. Retrieved from:
http://www.access-board.gov/508.htm

Vanderheiden, G. C. (2008). Ubiquitous accessibility, common technology core, and micro assistive technology. ACM Transactions in Accessible Computing 1(2), 10.1-7.

Vicente, M. R., & Lopez, A. J. (2010). A multidimensional analysis of the disability digital divide: some evidence for Internet use. The Information Society 26(1), 48-64.

World Wide Web Consortium (2008). Web Content
Accessibility Guidelines (WCAG) 2.0. Retrieved from:
http://www.w3.org/TR/WCAG20/

#### Proposed Priority:

Under this priority, the RERC must research, develop, and evaluate innovative solutions to the problem of inaccessibility of current and emerging information technologies and technology interfaces for individuals with disabilities. These solutions may include cloud computing applications that allow for personalized accessible interfaces. The RERC must focus its research and

development activities on promoting access for individuals with disabilities to the multiple technologies used in the home, the community, and the workplace. The RERC must research, develop, and evaluate built-in accessibility and flexibility features in interfaces of mainstream products. The technical approaches developed by the RERC must have the following characteristics: (i) They must make it possible for people with disabilities to access and use the same mainstream IT products as consumers generally, to the greatest extent achievable, rather than requiring people with disabilities to use specialized products; (ii) They must support access and use by people with the widest achievable range of disabilities, rather than being limited only to particular disability groups; (iii) They must provide as much as possible a consistent user interface, when applied to different products; (iv) They must be designed to be extensible, so as to be applicable to new IT products as they emerge; and (v) They must be developed along with methods that would enable developers of IT products to incorporate the new approaches into IT products at reasonable cost. In addition, this RERC must research, develop, and evaluate simple and inexpensive ways to activate and control IT access features for use by individuals with disabilities. This RERC must work

collaboratively with the RERC on Telecommunication Access and the RERC on Mobile Wireless Technologies.

## General RERC Requirements:

Under this priority, the RERC must be designed to contribute to the following outcomes:

- (1) Increased technical and scientific knowledge relevant to its priority research area. The RERC must contribute to this outcome by conducting high-quality, rigorous research and development projects.
- (2) Increased innovation in technologies, products, environments, performance guidelines, and monitoring and assessment tools applicable to its priority research area. The RERC must contribute to this outcome through the development and testing of these innovations.
- (3) Improved research capacity in its priority research area. The RERC must contribute to this outcome by collaborating with the relevant industry, professional associations, institutions of higher education, health care providers, or educators, as appropriate.
- (4) Improved usability and accessibility of products and environments in the RERC's priority research area. The RERC must contribute to this outcome by emphasizing the principles of universal design in its product research and development. For purposes of this section, the term

"universal design" means the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

- (5) Improved awareness and understanding of cuttingedge developments in technologies within its priority
  research area. The RERC must contribute to this outcome by
  identifying and communicating with relevant stakeholders,
  including NIDRR; individuals with disabilities and their
  representatives; disability organizations; service
  providers; editors of professional journals; manufacturers;
  and other interested parties regarding trends and evolving
  product concepts related to its priority research area.
- (6) Increased dissemination of research in the priority research area. The RERC must contribute to this outcome by providing technical assistance to relevant public and private organizations, individuals with disabilities, employers, and schools on policies, guidelines, and standards related to its priority research area.
- (7) Increased transfer of RERC-developed technologies to the marketplace. The RERC must contribute to this outcome by developing and implementing a plan for ensuring that all technologies developed by the RERC are

made available to the public. The technology transfer plan must be developed in the first year of the project period in consultation with the NIDRR-funded Disability Rehabilitation Research Project, Center on Knowledge Translation for Technology Transfer.

In addition, under this priority, the RERC must--

- Have the capability to design, build, and test prototype devices and assist in the technology transfer and knowledge translation of successful solutions to relevant production and service delivery settings;
- Evaluate the efficacy and safety of its new products, instrumentation, or assistive devices;
- Provide as part of its proposal, and then implement, a plan that describes how it will include, as appropriate, individuals with disabilities or their representatives in all phases of its activities, including research, development, training, dissemination, and evaluation;
- Provide as part of its proposal, and then
   implement, a plan to disseminate its research results to
   individuals with disabilities and their representatives;
   disability organizations; service providers; professional
   journals; manufacturers; and other interested parties. In
   meeting this requirement, each RERC may use a variety of

mechanisms to disseminate information, including state-ofthe-science conferences, webinars, Web sites, and other dissemination methods; and

• Coordinate research projects of mutual interest with relevant NIDRR-funded projects, as identified through consultation with the NIDRR project officer.

# Types of Priorities:

When inviting applications for a competition using one or more priorities, we designate the type of each priority as absolute, competitive preference, or invitational through a notice in the <a href="Federal Register">Federal Register</a>. The effect of each type of priority follows:

Absolute priority: Under an absolute priority, we consider only applications that meet the priority (34 CFR 75.105(c)(3)).

Competitive preference priority: Under a competitive preference priority, we give competitive preference to an application by (1) awarding additional points, depending on the extent to which the application meets the priority (34 CFR 75.105(c)(2)(i)); or (2) selecting an application that meets the priority over an application of comparable merit that does not meet the priority (34 CFR 75.105(c)(2)(ii)).

Invitational priority: Under an invitational priority, we are particularly interested in applications that meet the priority. However, we do not give an application that meets the priority a preference over other applications (34 CFR 75.105(c)(1)).

## Final Priority:

We will announce the final priority in a notice in the Federal Register. We will determine the final priority after considering responses to this notice and other information available to the Department. This notice does not preclude us from proposing additional priorities, requirements, definitions, or selection criteria, subject to meeting applicable rulemaking requirements.

 $\underline{\text{Note}}\colon$  This notice does  $\underline{\text{not}}$  solicit applications. In any year in which we choose to use this priority, we invite applications through a notice in the  $\underline{\text{Federal Register}}$ .

#### Executive Orders 12866 and 13563

#### Regulatory Impact Analysis

Under Executive Order 12866, the Secretary must determine whether this regulatory action is "significant" and, therefore, subject to the requirements of the Executive order and subject to review by the Office of Management and Budget (OMB). Section 3(f) of Executive

Order 12866 defines a "significant regulatory action" as an action likely to result in a rule that may--

- (1) Have an annual effect on the economy of \$100 million or more, or adversely affect a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities in a material way (also referred to as an "economically significant" rule);
- (2) Create serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) Materially alter the budgetary impacts of entitlement grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- (4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles stated in the Executive order.

This proposed regulatory action is not a significant regulatory action subject to review by OMB under section 3(f) of Executive Order 12866.

We have also reviewed this regulatory action under Executive Order 13563, which supplements and explicitly reaffirms the principles, structures, and definitions governing regulatory review established in Executive Order

- 12866. To the extent permitted by law, Executive Order 13563 requires that an agency--
- (1) Propose or adopt regulations only upon a reasoned
  determination that their benefits justify their costs
  (recognizing that some benefits and costs are difficult to
  quantify);
- (2) Tailor its regulations to impose the least burden on society, consistent with obtaining regulatory objectives and taking into account--among other things and to the extent practicable--the costs of cumulative regulations;
- (3) In choosing among alternative regulatory approaches, select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity);
- (4) To the extent feasible, specify performance objectives, rather than the behavior or manner of compliance a regulated entity must adopt; and
- (5) Identify and assess available alternatives to direct regulation, including economic incentives--such as user fees or marketable permits--to encourage the desired behavior, or provide information that enables the public to make choices.

Executive Order 13563 also requires an agency "to use the best available techniques to quantify anticipated present and future benefits and costs as accurately as possible." The Office of Information and Regulatory Affairs of OMB has emphasized that these techniques may include "identifying changing future compliance costs that might result from technological innovation or anticipated behavioral changes."

We are issuing this proposed priority only upon a reasoned determination that its benefits justify its costs. In choosing among alternative regulatory approaches, we selected those approaches that would maximize net benefits. Based on the analysis that follows, the Department believes that this proposed priority is consistent with the principles in Executive Order 13563.

We also have determined that this regulatory action would not unduly interfere with State, local, and tribal governments in the exercise of their governmental functions.

In accordance with both Executive orders, the

Department has assessed the potential costs and benefits,

both quantitative and qualitative, of this regulatory

action. The potential costs are those resulting from

statutory requirements and those we have determined as

necessary for administering the Department's programs and activities.

The benefits of the Disability and Rehabilitation
Research Projects and Centers Programs have been well
established over the years, as projects similar to the one
envisioned by the proposed priority have been completed
successfully. Establishing new RERCs based on the proposed
priority would generate new knowledge through research and
development and improve the lives of individuals with
disabilities. The new RERCs would generate, disseminate,
and promote the use of new information that would improve
the options for individuals with disabilities to fully
participate in their communities.

<u>Intergovernmental Review</u>: This program is not subject to Executive Order 12372 and the regulations in 34 CFR part 79.

Accessible Format: Individuals with disabilities can obtain this document in an accessible format (e.g., braille, large print, audiotape, or compact disc) by contacting the Grants and Contracts Services Team, U.S. Department of Education, 400 Maryland Avenue, SW., room 5075, PCP, Washington, DC 20202-2550. Telephone: (202) 245-7363. If you use a TDD or TTY, call the FRS, toll free, at 1-800-877-8339.

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www.gpo.gov/fdsys. At this site you can view this document, as well as all other documents of this Department published in the Federal Register, in text or Adobe

Portable Document Format (PDF). To use PDF you must have Adobe Acrobat Reader, which is available free at the site.

You may also access documents of the Department published in the <u>Federal Register</u> by using the article search feature at: www.federalregister.gov. Specifically, through the advanced search feature at this site, you can limit your search to documents published by the Department. Dated: April 12, 2013.

Michael K. Yudin
Delegated the authority
to perform the functions
and duties of Assistant
Secretary for Special
Education and
Rehabilitative Services.

 $\frac{\text{[FR Doc. 2013-09043 Filed}}{\text{04/16/2013 at 8:45 am; Publication}}$  Date: 04/17/2013]